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HISTORICAL ARCHEOLOGY IN WESTERN PARKS: A CONTEXT FOR MANAGEMENT

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Recently, the regional historical staff called regarding a cluster of 1940s buildings slated for demolition by park managers. Historians and architects had looked at the buildings and found them to be without redeeming value. They were, however, intrigued by a small adobe ruin on the property. Could this ruin be of interest to the historical archeologist, they wondered? We drove to the park, looked at the property, and agreed that, indeed, the 1940s frame buildings didn't amount to much. The older adobe ruin was another story. It also was an old ranch building, with remnants of footings and walls, traces of outbuildings and fences, and, best of all, a large accumulation of late-19th-century trash.

We judged the site to be significant, and recommended that it not be disturbed. Our evaluation surfaced questions concerning historic sites management as practiced by archeologists. Among other things, we questioned our own interest in the adobe, and lack of interest in the 1940s buildings. Were we addicted to ruins? Weren't the adobe and other frame buildings remnants of the same kind of human behavior? Was age a sufficient criterion for assessment? Wouldn't it be better to get a detailed record of each historic property first, then consider what to do with it at a more leisurely pace?

In the East, we often perceive historical resources as standing structures (like Independence Hall) and old, buried sites (like Jamestown). Western sites are perceived as thin veneers of historic trash (often fairly recent in age) and low, crumbling ruins. In a sense, then, we think of Eastern sites as old and vertical, and Western sites as young and horizontal. There is a further tendency to believe an intrinsic difference in importance exists between the two configurations. While this is true to an extent, it is at the same time illusory. The majority of historical properties, both East and West, date from the 19th century or later; only about 10 percent are older. We are, after all, a young country. By the same token, outstanding-wall structures and deeply buried historical sites are uncommon anywhere in the park system.

To understand the real situation, it is helpful to conjure up the image of the palimpsest, a parchment written upon and erased, time and again. The historic landscape is much like this, bearing as it does the multiple faded impressions of past human use. We have in both East and West the same task: making sense out of an obscured, superimposed, and fairly young historic landscape.

Traditionally, managers called upon historians and architects to provide guidance on historic properties with remains aboveground. The most common framework for analysis has focused on heritage values. In this perspective, a historical property is the expression of a historic event or period, such as a church, courthouse, or famous person's birthplace. Evaluation and preservation center on the principal time of occupation.

This is fine as far as it goes, but too often the other aspects of a complex landscape created by prior use, modification, restoration, and reuse have been ignored. These processes are expressions of cultural and social, as well as historical, change. The problem is compounded when we deal with late 19th and early 20th century properties. Sites less than 50 years old merit attention only when some agreed upon heritage value is attached. We argue that this view needs to be broadened to include wider ranging social trends, and believe that historical archeologists are in a position to provide a needed contribution to the evaluation process.

Assuming that a site has solid context and promising content, archeologists must devise valid, significant research questions. In assessing historical properties, archeologists make use of the same body of legislation that the historian uses, particularly Title 36 CFR 800. This document provides a guide to evaluating sites for nomination to the National Register of Historic Places. It gives us imperfect, but at least explicit, criteria for evaluation. The criterion of greatest importance to the archeologist is that of information potential.

In recent years, an increased self-awareness among archeologists has led us away from a purely descriptive and historical approach, to consideration of questions more solidly in the social science tradition. In addition to cultural history, we ask questions about the composition of societies and the various factors that govern social behavior and interaction. From American prehistoric archeology, we also bring with us a processual perspective on cultural resources, the explanation of events in sequence, which is a powerful tool for investigation of historic sites.

Also significant to such an approach are two characteristics of archeological endeavor. First, the specific period under study may be unimportant. If we choose to study human interaction within a 100 year time segment, it may not matter if the episode ended a thousand years ago, or only yesterday. We may apply the same body of method and theory to a recent ranching community that we could apply to a study of Neolithic herdsman. In fact, studies of the recent past are liable to be more complete because of corroborating evidence from the historical record and the memories of our living ancestors. Secondly, an historic period property does not have to be associated with notable events to be of value to the archeologist. We deal with broad patterns in material culture and with statistical populations and probabilities. Thus, we are doing the anthropology of the ordinary, not the unique.

If we are to apply our anthropological methods successfully, we must treat each historic property as an integrated cultural whole rather than an aggregate of unrelated parts. Each complex of trash dumps, outbuildings, and ruins has the potential to inform us about the past; these scant remains form the skeletons of extinct social groups. To put flesh back with the bones, assessment and recording must be complete. As a start we must press for systematic survey and inventory of all threatened properties regardless of age or function.

Our point has been not to criticize our colleagues, but to argue for an expanded and integrated approach to historical property evaluation and treatment. We argue that the historic preservation establishment has tied itself to known and familiar heritage values at the expense of values found in social science. Bolstered by National Register criteria, a traditional interpretation of importance (often based on age and historical associations of sites) predominates.

The mission of the National Park Service charges us to be alert to the preservation needs of heritage properties, particularly those of national significance -- the Mesa Verde, Independence Hall, Lincoln's Birthplace category of property. Our mission, and our traditional approach, tells us to do something with these valued structures--preserve, stabilize, rehabilitate, etc. This is of priority importance, but ignores thousands of modest structures and sites in the parks, often tucked away in inaccessible and rarely visited corners. These represent highly valuable resources, which are gaining value daily as their counterparts are destroyed by civilization's encroachments outside of parks.

The choice should not be to preserve the significant and discard the insignificant a priori, but to inventory all historic properties at a minimum scientific level. Afterward, more data can be gathered (or not gathered), and protection can be afforded at graduated levels, depending on the significance of the property. From an anthropological viewpoint, this treats all cultural resources as statistical populations which, in and of themselves, have the potential to inform us about the past. From the managers' viewpoint, it will allow great precision in choosing from factually supported alternatives.

To return to the example that started these ruminations, what would we do now for the late 19th and early 20th century western ranch sites? We would treat them as any other archeological resource -- do a ground survey, then record and map what was observed, and submit this as part of the data for determining management alternatives.

In fact, we have recently done precisely this at the Faraway Ranch Site in Chiricahua National Monument. This late 19th-20th century site has been determined important by historians because it represents the closing of the western frontier, and it became a well-known dude ranch. As part of the historic structures report, we conducted an intensive survey, recording all surface phenomena around the ranch buildings. Not only did this include the ranching paraphernalia of the Erickson family who owned the ranch, but also prehistoric Indian sites as well as trash dumps from a CCC camp. Of considerable topical interest was the discovery of the thinly scattered surface remains of the tent camp of a black calvary troop that was part of the campaign against Geronimo's Chiricahua Apaches in 1885 and 1886.

The final decisions for management of the Faraway Ranch surface remains have not been made, but we expect that no further major archeological effort will be necessary unless construction or maintenance entails excavation. We now have well documented base data upon which to plan further actions at the ranch.

In conclusion, we are not calling for new, elaborate, or expensive programs, nor are we suggesting that all historical properties are significant in archeological terms. We merely recommend assessing all threatened properties--not digging up or stabilizing every brick pile and garbage dump in the park system. If something looks as if it may have value, why not Just leave it alone until a systematic assessment can be made?

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THE ROLE OF ANTHROPOLOGY IN THE NATIONAL PARK SERVICE

Douglas H. Scovill

In 1832, George Catlin, the renowned Western painter, lamented the decline of the Plains Indians and the buffalo herds. He urged their preservation 'in a magnificent park... what a beautiful and thrilling specimen for America to preserve and hold up to the view of her refined citizens and the world.

Today, establishment legislation and presidential proclamation charge the Service with the management and interpretation of cultural resources within parks and monuments, specifically those with nationally significant heritage values associated with Native Americans. Moreover, the management of our cultural or natural parks is directly associated with what Native American tribes do with their lands (either adjacent to or in the parks) or with their legal rights to use lands administered by the Park Service. Examples abound in many units of the system where lands have been used traditionally for centuries, and where these uses continue to this day.

Because of this nexus of heritage values, physical resources left by ancient cultures, and current needs of Native peoples who now find their secret and traditional places on lands we administer, the Park Service seeks to manage these resources, and relies not only on the expertise of the archeologist but also on the cultural anthropologist. And it uses them at all levels of the management decision making process.

Chaco Canyon, Bering Land Bridge, and Puukohola Heiau are the obvious signatures of archeological research, monuments to the objects and structures of the past. But there are also less visible ones. The Park Service has channeled archeological research into the fields of interpretation, maintenance, firefighting, law enforcement, Native American concerns, as well as other aspects of park operations. This issue and the following issue of the CRM BULLETIN will concentrate on some of these uses.

In the 1930's and 1940's when NPS archeology first took its direction from Arthur Kelly and John Corbett, the Service needed to know exactly what it protected in order to preserve and interpret it. The big excavations at Ocmulgee, Jamestown, and Fort Frederica gathered and interpreted information the painstaking traditional way with trowel and brush. But a shift toward non-destructive archeology brought in a new kind of technology and a new kind of professional. In the article by Keith Anderson and George Teague, the authors provide an overview of the archeological tradition as well as a proposal to management for a possible future approach to the profession.

Taking a slightly different direction, Barbara Segraves delineates the benefits to management of the RP3 Process, a planning approach utilizing available information concerning a site without budgeting for additional research.

David Orr, concerned with budgetary limitations and the pressing need for archeological research in his region, enlisted the help of high school volunteers at City Point. The mutual benefit of the program, both to the Service and to the volunteers, made it a successful one.

John Clonts deals with the issue of archeological collections and what curators are doing to simplify the process of cataloging them.

The influence of archeology on park operations is represented by several articles in this issue. Roger Kelly explains how the updated Code of Federal Regulations protects archeological remains at the park level. The archeologists at Bandelier during the La Mesa fire graphically point out the importance of archeologists on the firefighting lines and how their presence diminished damage to the valuable cultural resources at the park.

Finally, Barbara Holmes writes on the importance of anthropology at Jean Lafitte National Historic Site and calls for the application of similar techniques elsewhere in the

Service. Richard Gould also recounts the importance of anthropology in dealing with Native Americans and the spirit of cooperation such concern engenders among Native American populations.

Ultimately, the counterpart of government anthropology and archeology programs is the work handled by private organizations. Mark Michels of the Archeological Conservancy writes about our prehistoric heritage which his organization is working to preserve.

These topics begin to touch on the uses to which archeology and anthropology are put in the National Park Service. The next issue of the CRM BULLETIN will cover such topics as the function of anthropology in planning, the role of archeology in maritime law, and the way in which predictive modeling is changing the face of the discipline. We hope these two issues will help to illustrate the many functions of anthropology and the decisions it influences at the park, the region, and the Washington level.

Douglas Scovill is Chief Anthropologist, WASO

SAY RANGER, CAN I KEEP THIS ARROWHEAD

Roger E. Kelly

Throughout the national park system, on wooden signs in picturesque meadows, near footpaths, beside adobe huts, across our cultural and natural landscape are the words: "Take nothing but pictures, leave nothing but footprints."

This slogan fully expresses the conservation ethos of the National Park Service. It reminds visitors that the parks are for all equally and that dismantling any part of them would be equal to breaking into a museum and carrying off the inaugural gown of Mary Todd Lincoln. It would be depriving generations of an irreplaceable piece of history. However, gentle reminders are seldom effective preservation tools, and a Code of Federal Regulations (CFR) exists to add "bite" to tactful warnings.

Violation of the Code of Federal Regulations protecting natural and cultural resources may range from a child's innocent attraction to a fragment of a ceramic pot to the intentional destruction of archeological sites to unearth artifacts. Park staffs face both situations and on occasion need the CFRs to make a warning stick.

"Say ranger, can I keep this arrowhead/old bottle/ship's fittings/ miners' pan/ or...?" The question sounds innocent and most of the time it is. A simple explanation of the conservation standards of the park may be enough to turn the casual visitor into a conservationist. But sometimes purposeful digging or collecting occurs and the incident is reported. How does 36 CFR Part 2 (the regulations governing cultural and natural resources preservation, scheduled for approval March, 1984) apply and how can it be implemented by park staff? Does the 1979 Archeological Resources Protection Act take precedent in most situations? When should a ranger use tact, persuasion, or a hard-line approach by writing a Magistrate Violation Notice (MVN) or Form 10-50? Each manager and park employee will have to answer these questions personally, but here are some ideas.

Definitions: The CFR defines two classes of historic resources: archeological resources and cultural resources." Both include portable and stationary items, whole and fragmentary artifacts. They can be located on land or beneath waters. But archeological resources pertain to material remains -- older than 50 years, whereas cultural resources fall in the age group of less than 50 years old which possess "significant cultural interest." This important phrase is not defined but should be interpreted as referring to a National Register of Historic Places property, a List of Classified Structures feature or structure, or a formally recorded archeological site.

Prohibited Acts: The CFR prohibits activities ranging from the possession of park resources to collecting, digging or otherwise removing resources from the area. The use of electronic discovery devices, such as magnetometer, sidescan sonar, subbottom profiler, metal detector, or mineral detector is also prohibited. Other methods of discovery or removal such as airlifts, prop-wash deflectors, and water dredges are not mentioned in the Code. Should these devices be used in a maritime setting, possession or collection of materials, or the destruction of a site must be proved in order to produce a conviction.

How Old Is It?: Although the 50-year rule determines what the CFR classifies as evidence, complications can arise which may obscure the issue. Visitors may be issued a MVN citation for illegally collecting old crockery with 19th Century makers' marks. However, identifiable pottery trademarks, bottle markings, or patent dates on old cast iron stove parts rarely mean exact year of manufacture which could range over many decades of time. Prehistoric artifacts of stone, fiber, or wood might seem easier to judge as older than 50 years, but may also be in doubt. Baskets hundreds of years old can look like those produced in the 1930's to satisfy the tourist trade. The bottom line to truly support a violation seems to be technical identification by curators, archeologists, or historians.

Issuing a Magistrate Violation Notice: When should an MVN be issued? What should be said to a parent who asks if his child can keep a chipped stone tool? To a visitor using an electronic discovery device? The CFR indicates that the removal or destruction of park resources is against the law. In cases of clear illegal intent, the MVN is issued with customary procedures. In cases where a visitor seems genuinely uninformed, the park staff should thank the person for bringing the resource to their attention, note discovery location and explain that such historic objects are part of the total park resources and have possible interpretive value to the park's themes. Indeed, some parks return innocently removed artifacts of this nature to trailside spots, in the hope that visitors will stray no further to remove additional artifacts in the back country. As a local paper aptly observed, the true value of an artifact is what it can tell modern man about its maker and it can tell its tale only if it is left where it was last used. When it is removed from that site, it has been stolen, if not from the modern day owner of the land, then from all the state's people.' After all, the entire park and its resources belong to all the people, with the Service as steward.

Posting signs, distributing a leaflet with a preservation message, or a mention of regulations, and regular spot-checks of sensitive resource areas have all been successful methods for increasing public awareness. Particularly susceptible resource locations with a record of visitor damage may require 'stake-outs' or magnetic, seismic, or infrared intruder detection devices to protect them. In a Magistrate Court, elements of proof would likely be required in the context of 36 CFR Part 2 as well as 18 CFR 641-642 (Theft of Government Property) and 18 CFR 1343 (Destruction of Federal Property) as separate counts. Thus, such electronic equipment and regular spot checks may be necessary to protect the resources, as at Petrified Forest NP.

Relationship of the new CFR to the Act of 1979: The Archeological Resources Protection Act of 1979 (ARPA) and its implementing regulations address a permit process, and violating it involves both civil and criminal felony offenses (with fines and jail terms). The resources ARPA protects are greater than one hundred years old, and have interagency implication (Bureau of Indian Affairs, TVA, and Departments of Interior, Agriculture and Defense). Arrowheads, bullets, and coins are excluded as archeological resources; but on park system lands, they are covered under 36 CFR Part 2. Our CFR addresses misdemeanor violations, occurring only on NPS administered lands. They cover violations involving human movement and discovery devices, but contain no permit process for excavations. Use of ARPA in a law enforcement situation seems to hinge on the intent of the accused who knowingly, voluntarily and purposefully excavates, removes or causes damage to a protected resource over a century in age on public land, without a permit.

Permits, Closures, and Taking of Research Specimens: The new CFR does authorize permits for natural resource specimen collection, but not archeological or cultural resources collection. However, nondestructive recording of rock art, historic inscriptions, or log cabin details could be permitted by a superintendent, with concurrence from regional office technical specialists. Closures of historic buildings, terrain areas, shorelines, or coastal waters, along with increased surveillance by park staff may help reduce the damage to resources.

Conclusions: Use of the revised 36 CFR Part 2 for cultural and archeological resource preservation will likely mean increased numbers of MVNs. Making them stick, however, will involve increased cooperation between cultural resource experts, field managers, and their staffs. Together, we should be able to reduce the damage to our cultural heritage.

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THE LA MESA FIRE: IMPACT ON CULTURAL RESOURCES AT BANDELIER NM

Diane Traylor, Lyndi Hubbell, Nancy Wood, Barbara Fiedler

The La Mesa fire began June 16, 1977, burning uncontrollably for seven days through Bandelier National Monument, Forest Service, and Department of Energy lands. More than 15,000 acres were burned. This had significant repercussions for both natural and cultural resources in the area.

The fire started on Mesa del Rito, just west of the Monument in Santa Fe National Forest. Variable weather conditions and differing fuel loads, combined with Bandelier's complicated topography, demanded diversified fire suppression approaches. Slurry (chemical retardant) drops began within two hours after the fire was reported and continued until nightfall. Fire crews also constructed a line nearly all the way around the fire. However, the fire reached a sheer cliff where no lines could be built. During that night, the flames dropped down into Alamo Canyon, and with shifting canyon and slope winds, burned back up the sides of the canyon outside the area of containment.

From there, a number of factors contributed to the fire's increasing destructiveness. Fuel moisture was critically low after a dry spring and early summer, and many forested areas had not burned for years. Considerable amounts of downed fuels (natural fire substances like decaying leaves) provided ample fodder. Also, daytime winds gusted to forty miles per hour, and while somewhat changeable, tended to blow from the southwest. This carried the fire into regions with a high percentage of downed fuels. Hand crews, bulldozers, slurry bombers, water tankers, and helicopters were quickly dispatched to the area. This contributed to the upheaval. Finally, fire suppression activities expanded during the next week with continuing increases of manpower and equipment to battle the fire.

During a fire, cultural resources are threatened by the fire itself and by related fire-suppression activities. This was clearly documented during a severe wild fire at Mesa Verde National Park in 1972 (Switzer 1974). In some cases, it appeared that the impact of suppression activities could be far more damaging to archeological resources than the fire. Though little can be done to protect sites from damage once a fire has broken out, damage resulting from fire suppression can be more selectively controlled and, in many cases, totally avoided.

Much credit goes to Dr. Milford Fletcher, NPS Regional Biologist, who recognized the potential danger to Bandelier's archeological heritage and recommended the use of archeologists to minimize fire suppression destruction. Despite initial skepticism from fire officials, Bandelier acted on Dr. Fletcher's suggestion. Archeologists assisted during fireline constructions, making this the first time in the history of park and forest management that archeologists were included in the firefighting scheme.

Archeologists worked individually or in pairs, in front of bulldozers and handcrews, guiding them away from sites. Others hiked or were helicoptered into backcountry areas to accompany line, mop-up, and sawyer crews monitoring these varied fire suppression activities.

While archeologists made their most important contributions during fireline construction, they also assisted in other ways. Their knowledge of backcountry terrain proved useful to fire crews unfamiliar with the area. Archeologists supplied crews with detailed topographic maps. On occasion, they served as impromptu interpretive guides to fire crews, explaining the Monument's prehistory, its native inhabitants, and the importance of leaving surface artifacts untouched.

By the end of the fire, it was apparent that the presence of archeologists on the firelines had in no way hindered the containment of the La Mesa Fire. That their presence helped avoid damage to cultural resources was clearly evidenced, leading to consideration of guidelines requiring their presence on future fires.

While all the post-fire studies from the La Mesa fire should be considered as a whole, the La Mesa Fire Study focused in particular on the impact of the fire and fire suppression activities on cultural resources within Bandelier National Monument. The study was designed in part to: a) survey all areas affected by fire suppression within the Monument boundaries; b) excavate selected sites burned in varying degrees for specific data on artifacts, architecture, and ecofacts; c) salvage sites damaged during fire suppression activities.

The recommendations which emerged from this study should help to mitigate the adverse effects of fire on cultural resources and assist resource managers to develop fire management programs based on findings of the La Mesa study.

RECOMMENDATIONS:

1. Perhaps the most important function is to keep the lines of communication open to all factions involved.
2. Contingency plans should be established by area resource managers according to the resource priorities they set within their jurisdiction and according to permissible policy. Furthermore, all personnel should be informed of that policy.
3. Areas should establish and maintain resource base maps showing exact site locations and provide copies to archeologists and fire bosses on firelines.
4. Under any circumstances in which cultural resources are threatened by fire, archeologists should be present to mitigate fire, fire suppression, or rehabilitation impact on these resources.
5. Priority attention should be given to bulldozer line construction, potentially the most destructive of the fire control functions. Handlines, helispots, fire camps, and mop-up areas should be closely monitored also.
6. All archeologists serving on fire duty should have completed a certified course on fire behavior and hold a current red card. They should also have knowledge in basic first aid and be competent in the use of topographic maps.
7. An archeological liaison officer should coordinate all activities of line archeologists with fire bosses, especially when more than one agency is involved with the fire.
8. Line archeologists should be briefed on their duty area and be certain of their function on the line.
9. Special flagging and pin flags in some color other than the bright red and orange commonly used by fire crews should mark sites, and everyone concerned with the fire should be aware of what that color means.
10. When feasible, archeologists should photograph fire suppression activities to record both damage and avoidance of sites and to provide photos for the fire record.

Controlling the fire is the prime concern for the firefighters. Cultural resources may have to suffer surface impact, but little or no damage need result from fire suppression if archeologists are present during these activities. During the La Mesa fire, Forest Service crews willingly cooperated in avoiding sites. However, certain procedures could have served the cause of preventative maintenance.

Removing high fuel content vegetation from the tops of sites or their periphery may be one solution to avoiding fire damage. Sites frequently have trees and other plants growing on them in abundance, and if periodically cleared, would create less fuel to catch.

Information on fire and fire suppression in connection with cultural resources should be taught at fire training centers. This would acquaint firefighters with archeologists and with cultural resources. Agencies dealing with cultural resources might also find this information useful.

While the La Mesa fire study has made inroads into the effects of fire on surface and subsurface materials, particular problems may exist in different areas of the country. Prescribed burning may become a more common practice as a means of preventing large scale fires such as the La Mesa fire. The study indicates a need to develop specific guidelines regarding cultural resources for key NPS areas, and general guidelines for fire management service-wide.

In the development of a fire management program, all sensitive cultural resources within areas scheduled for prescribed burning should be considered. This can be accomplished by sample surveys, literature searches, assessments, or other mechanisms to formulate a baseline information source. In instances where a prescribed fire area contains structures listed in the National Register, a Section 106 compliance procedure must be initiated prior to the prescribed fire. Care should also be taken so that discovery sites not listed in the National Register are protected.

During any fire, the four basic sources of damage to cultural resources are fire intensity, duration of heat, heat penetration into the soil, and use of fire suppression equipment. During prescribed burning these four elements will be minimized; however, surface impacts could be realized depending on type and amount of vegetation located on an archeological site. The four elements mentioned will be minimized due to fast-moving cooler fires which would be burning only the understory vegetation with minimal handlines for control. Also, post fire erosion could alter the surface of prehistoric sites, an element to be minimized during any prescribed fire.

Direct fire damage to artifacts appears to be mainly confined to those surface materials. Ceramics are most commonly oxidized or carbonized by exposure to the fire. Lithic materials sometimes exhibit surface residues, and hydration factors can be affected. Surface pollen grains can be destroyed by temperatures above 300 F. Controlled testing is needed as part of the prescribed fire testing program to determine surface temperatures, heat penetration, treatment of various surface materials, and minimal impacts to cultural resources.

Until La Mesa, little attention was given to fire and fire suppression impact on cultural resources. Now that a study has been initiated, the positive presence of archeologists during fires can be shown. Hopefully, situations encountered during the La Mesa fire can and will be part of a useful and ongoing program of research and policy for all those involved with fire and fire management.

The authors completed the study as part of a program in the Southwest Regional Office. Questions concerning the study can be addressed to the Regional Archeologist in the Southwest Region.

CHECKLIST PROCEDURES FOR PERSONAL PATROLLING

The following is a checklist for personal patrolling of archeological sites, developed by Kristine Olson Rogers, Assistant United States Attorney, Portland, Oregon. It has been used successfully in ARPA training courses.

1. Know the archeological sites in your area. Read the site reports. Go out of your way to stop by each site as often as possible and periodically photograph its condition. (Most of these sites are out of your way, but the only pothunters we've caught in the last five years were by chance encounters in remote places).

2. Post the sites or areas clearly and permanently as federal property. (There are two schools of thought on this one: that posting attracts pothunters, and that posting is necessary for public awareness and jury convictions!)

3. Be armed at all times with a camera and several speeds of film (and, ideally, a telephoto lens). Photograph findings from every angle, but be careful to keep a log of times, distances, etc.

4. If a suspect is encountered at a site, questioning is encouraged and proper. No need for Miranda warnings if you are not a law enforcement officer or if the person is not under arrest, but avoid words like custody, seizure, crime, etc. Get as much identifying data as possible. Ask to see a driver's license, social security number, etc.

5. Note equipment and vehicles (get careful description and license plates) in area. ARPA provides for their forfeiture upon conviction. You are entitled to seize screens, shovels, dust masks, etc., in plain view, but give the subject a receipt, have it signed and keep a copy. You are entitled to inquire about any equipment and inspect items in the beds of pickup trucks. By all means, take any abandoned property.

6. Take notes on the condition of the area (e.g., light, fresh dirt piles, weather, moisture, approximate sizes of any holes, etc.). Write down everything you can remember as soon as possible after the incident and retain your original notes (they are subject to review by defense attorneys).

7. Carry names and phone numbers of important contacts with you at all times. After any encounter with suspect(s) at a site, immediately phone: law enforcement assistance (within your own agency if available, or FBI, state police, or county sheriff); an agency archeologist to determine the need for emergency professional assessment of any damage; an assistant U.S. attorney or the desk attorney on call for that week. Prompt reporting in these cases is crucial.

8. These are all potential felony criminal cases. Handle and preserve the evidence accordingly. Take careful field notes. If, for some reason, criminal prosecution is inappropriate or unsuccessful, there are always civil remedies which need the same sort of documentation.

9. Do not let a suspect remove or keep possession of any artifact from a federal site. Any objects found at these sites are federal property and should be retained by you as such. Objects which you may not be able to readily identify (such as manos and metates) can nonetheless be quite valuable. So, no removal of even "ordinary" appearing rocks, dirt, etc.

10. Good luck -- because that's what these cases seem to hinge on.

RP3: THE RESOURCE PROTECTION PLANNING PROCESS

Barbara Segraves

The past four decades have witnessed an alarming decline in the finite number of archeological and historical properties which tangibly represent our national heritage. Despite an occasional success in the rehabilitation of an historic building or the protection of an important prehistoric site, the management and preservation of these irreplaceable cultural resources are subject to the pressures of inflation, diminished budgets, limitation of governmental involvement in the private sector, and competing national priorities. Such constraints constitute a very real threat to the archeological and historical properties that remain.

RP3 Process

The Resource Protection Planning Process (RP3) provides an approach to comprehensive planning for the management of such cultural resources. This process provides local guidelines for identification, evaluation and protection, and functions to reduce procedural delays and foster a desirable cost/benefit ratio in agency preservation expenditures.

Preservation involves a range of protective approaches, including data recovery, in situ preservation and even site destruction without data recovery. In other words, preservation is a system of critical decisions about cultural resources designed to ensure a maximum number of survivors (Aten 1982:231). The essence of preservation planning is the definition and implementation of an informed and practical method to retain the maximum number of opportunities for conservation, research, and interpretation.

Cultural resource management focuses on three fundamental issues: 1) identification - whether and by what method sites should be looked for; 2) evaluation -- the recognition, among identified sites, of the more important ones; and 3) treatment -- action taken to protect important sites. It is only by identifying, evaluating, and treating individual properties as members of a class or group of like properties (that is, by viewing individual resources contextually) that reliable managerial decisions can be made.

The key word is contextually. Rather than accumulating data by identifying, evaluating, and protecting all sites, a contextual orientation uses information currently known or readily obtainable about the cultural resources of an area. When properties are seen in context, it is possible to make choices about preservation that reflect an informative and balanced sampling of prehistoric and historic settings. The risk of preserving an incomplete and/or biased representation of these contexts is significantly lessened. Also, as a result of being a managed approach based on the production of needed information, the cost of effective planning information is much lower than would be the case if an attempt were made to gather all possible information.

HOW RP3 OPERATES

Preservation planning is an ongoing process of organizing information, through a systematic series of steps, into a form useful for management purposes. Briefly, RP3 operates by 1) evaluating managerial issues of logistics and planning scale and objectives; 2) partitioning cultural resource data into units of manageable size; 3) developing goals for each in order to accomplish the identification, evaluation, and treatment of cultural resources; 4) modifying these prepared objectives into an achievable operating plan based on analysis of the social, political, and economic planning environment; and 5) incorporating new information, as it is available, into the operating plan for each unit. The

central organizing concepts of this system are study units, operating plans, and management units.

STUDY UNITS

By placing cultural resources within a particular context, study units impose order and coherence on what is otherwise an undifferentiated and thus uninformative body of data. Study units are descriptive or theoretical organizing frameworks which group together like or related properties into spatially and temporally discrete thematic categories. For instance, "anthracite coal mining in northeastern Pennsylvania between 1860 and 1920" provides one example of a study unit.

Properties related to the anthracite theme are found in a 484 square mile area in northeastern Pennsylvania that contains a high concentration of low-sulfur anthracite. Historic property types known or expected to be present within the study area include coal breakers, mine shafts, and processing facilities, miner's communities and ethnic social clubs representing successive waves of immigrants, a canal and rail transportation system, and the homes of prominent mine owners.

OPERATING PLAN

A study unit not only places cultural resources within a context, but it also transforms the unit's technical data into usable managerial information through the operating plan. The operating plan constitutes a program for managing the resources of a study unit by providing for context-based answers to a series of questions about identification (specifics concerning quantity and quality of existing inventory and survey information, data gaps, known or anticipated property types and their condition), evaluation (determining significance and integrity of property types in terms of National Register criteria), and treatment (establishing goals of conservation, research, re-use, and interpretation for a study unit's resources). In other words, answers to these questions, keeping in mind, preferred goals and their likelihood of achievement, provide site- or property-specific recommendations or guidelines pertinent to classes of sites within the study unit.

A critical evaluation of the planning goals in light of the known and projected political, cultural, and economic constraints in the study unit area results in a modification or redefinition of the goals of conservation, research, re-use, and interpretation. Integration of the preferred plan with general development objectives so as to maintain the integrity of the study unit's cultural resource base yields a practical preservation strategy, the operating plan.

In the anthracite study unit, for example, the preservation of a rich variety of resources surviving from the historic coal industry must be carried out in the context of a declining regional economy, a marked population decrease since the 1940's, and an area where modern pit mining, itself a force in the destruction of historic mining, is a major employer. These realities must be accommodated by the preservation planning process. The ideal formulation provides the baseline against which success in the achievement of general preservation objectives can be measured.

MANAGEMENT UNIT

Finally, the intersection of than one study unit forms a management unit. A synthesis of the doubled or multiple operating plans thus superimposed requires reconciliation of potential incongruencies and conflicts to create a single set of objectives and priorities -- a single coherent management plan -- for the study area.

Based on fundamental planning principles, the general sequence of activities outlined by the RP3 process is central to any good planning program. New information can be fed back into the system, modifying the basis for subsequent management decisions. For example, returning briefly to our hypothetical study unit, the acquisition and interpretation of the miner's village at Eckley by the State Museum Commission would result in shifting treatment priorities for this property type, focusing on documentation or conservation

where possible, but recognizing that a representative example of this property type has been permanently preserved. Planning by means of a flexible process rather than o a rigid blueprint as the plan remains both relevant according to a rigid blueprint assures that the plan remains both useful and relevant.

APPLICATION

In an effort to strengthen and improve the process of cultural resource management planning within the National Park System, RP3 will be tested this year in national parks selected to represent many of the important management issues in the 335 NPS units. RP3 has important potential as a useful planning methodology for park managers implementing the cultural resources segment of the General Management Plan or the Resource Management Plan. It is consistent with the existing planning process described in NPS-2 (NPS Planning Guidelines), in that the identification, evaluation, and treatment of cultural resources inform and direct plan implementation. Further, it is designed to enhance the existing process as a method for organizing available information and making it useful to both short- and long-range management and budget allocation decisions.

Suggested Reading

National Park Service

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SOCIO-ANTHROPOLOGISTS: THE POOR RELATION IN THE FAMILY OF CRM PROFESSIONALS

Barbara Holmes

Look at the qualifications for any group of cultural resource managers in the National Park Service, and what do you find? Historians, architectural historians, historic architects and archeologists are widespread; anthropologists are rare. By anthropologists, I mean the term in its most common usage -- socio-cultural anthropologists, incorporating both contemporary and historic perspectives.

The reasons for the relative scarcity of anthropologists are evident. CRM, as construed from historic preservation legislation and NPS policy, is largely concerned with the management and preservation of standing or ruined structures. This emphasis on material culture is complemented nicely by the important material responsibilities held by the Service. Add aspects of culture other than material, however, and the usual group of CRM professionals begins to show the inherent limitations of their approach.

Often we seem more interested in objects than in the people that produced them. But why do we preserve examples of stylistic merit and craftsmanship, or places connected with important historical patterns, events, and people, if we do not also recognize the people that created these things? I don't mean people lost in the sense individuals associated with buildings but also in the sense of the society which nourished them and the culture within which the creation was realized. Is our cultural heritage merely a collection of things? The frozen landscape of our past?

If we admit the NPS is managing cultural resources in order to preserve a record of the societies and cultures which created them, then we must also admit that we should know much more about the expressive culture, world view, family structure, politics, subsistence, and language of the variety of ethnic groups which through history have built the cultural landscape of this country. Anthropologists can add this perspective to our present concrete mentality.

Anthropologists can add an exciting new dimension to CRM as well -- the management of culture itself. This can take two directions: the documentation of culture, and the creation of a climate in which the culture carriers, the people, take an active interest in their own cultural heritage. Documenting culture is the easier approach, and involves multidisciplinary research projects by linguists, folklorists, ethnohistorians, socio-cultural anthropologists, as well as the specialists in material culture.

Creating a climate of enlightened cultural self-interest is the more difficult, and more satisfying, approach. Providing encouragement, technical aids, library resources, spare professional direction, and prestige through association with the NPS is often all the impetus needed by local societies to start and continue to collect oral histories, photographic collections, archives of personal papers, videotapes, and artifacts; to sponsor traditional and new style celebrations; to visit local schools; and to act as cultural ambassadors between their community and others. The quality of these activities does not have to be either amateurish or strained. Anthropologists, because they are trained to view people within the context of their cultural system, are the best professionals to guide both the documentation and assistance aspects of such a management program.

Jean Lafitte National Historical Park was created to preserve and interpret the cultural diversity of the Mississippi River Delta, and the park has taken the two-pronged approach described above as its management strategy. While Jean Lafitte has direct legislative mandate to manage culture, I believe that other parks can benefit from its example.

Active cultural outreach programs build constituencies, and add dramatically to interpretive programs with little expense. Issues concerning local ethnic groups can be dealt with before they become crises. And last but not least, the material remains of our cultural

resources can be managed within the context of who made them, not just what we see today.

The Park Service does not preserve only the bits and pieces of our heritage which have been left behind. It interacts often and extensively with native peoples and cultural communities. In order to fully manage cultural resources within their context, anthropologists must become an essential part of the CRM team, and not just another poor relation.

Barbara Holmes worked as a cultural anthropologist at Jean Lafitte National Historical Park.

ETHNOARCHEOLOGY IN THE SERVICE OF CRM

Richard A. Gould

In 1962, long before the establishment of Redwood National Park, I embarked on a program of ethnographic and archeological research in northwestern California. At that time, I had the good fortune to meet Mrs. Ruth K. Roberts, whose commitment to a better public understanding of the Indians and to their general welfare extended back almost 50 years. She introduced me to Alice Spott Taylor, one of anthropologist A. L. Kroeber's most distinguished Yorok Indian friends and informants, then living in a tiny trailer poised on the bluff overlooking the site of Old Requa, near the mouth of the Klamath River. She also introduced me to the Indian Shakers at Smith River, the southernmost congregation of a religious sect founded in 1881 by a Puget Sound Indian named John Slocum. Through these people I became better acquainted with the elderly Athabaskan-speaking people of the area, the Tolowa and Tututni.

Although eager to begin archeological excavations, I followed the advice of Dr. Frederica de Laguna, then a visiting scholar at the University of California, supervising my research. She suggested I wait and learn as much as possible about the contemporary Indians and their traditions. With a strong interest in California Indian anthropology, I pro interview and observe for before attempting to dig.

Gaining the confidence of local Indians was the first step. The history of relations between Indians and whites had been an unhappy chronicle of atrocities, disease, and alcoholism. The looting of Indian cemeteries had led many Indians to equate archeology with grave-robbing. At that time it was not unusual for local collectors to display "Indian bones" and to loot artifacts in ways that outraged the Indians.

My interviews with elderly Tolowa and Tututni Indians had to be punctuated with reassurances that at no time would my colleagues or I attempt to excavate Indian burials. Fortunately, the Indians of this area were patient and unprejudiced. Eventually, they keenly supported this effort to understand and preserve a record of their traditional culture.

I discovered Tolowa and Tututni Indians maintained oral traditions that precisely detailed the locations of habitation sites and their physical features. Of the sites abandoned before the whites settled in this area, one at the tip of Point St. George had traditions describing the European introduced disease (probably cholera) that wiped out the village.

The excavations we conducted at Point St. George were intended, among other things, to test the historicity of such oral traditions. An approach of long-standing, it has worked well in the study of ethnoarcheology, which involves observing and documenting the behavior of present day people and using these observations to explain the patterning of archeological materials in excavated and surveyed sites. The continuous interaction between archeologists and Indians during this research provided opportunities for making such observations and testing them.

For example, our excavations, carried over a wide area and sampled in parts of the site, produced evidence only of pre-European occupation. No European artifacts or other traces of Euro-American culture (i.e. bones of domesticated or introduced animals, metal saw-marks in the butchered animal bones), appeared in the excavated site materials to confirm the precontact abandonment of the village mentioned in the oral traditions. The stratigraphy and radiocarbon-dating at the site revealed a two-phase history of occupation: an early phase (Point St. George I) dating back to at least 310 B.C. and a late phase (Point St. George II) containing domestic architecture and materials connected directly to historic period counterparts. Since the Point St. George II phase ended prior to the appearance of European American cultural materials in the area, this case afforded a good opportunity to test oral tradition associated with an abandonment that took place over 100 years earlier.

Through their oral traditions, Indians knew the exact location of prehistoric houses when nothing on the soil surface indicated their presence. Unlike other Indian village sites in the area, there were no housepits on the surface -- perhaps because these houses were older and the traces less well preserved. A random survey of the site might have uncovered such houses, but only with great expense and time. Instead, the Indians walked to an apparently featureless spot on the grassy, treeless peninsula and pointed to the ground, saying "Dig here"

Invariably we found exactly the kinds of materials they had predicted, such as naturally preserved houseplanks of redwood (along with other house features such as floorpits, hearths, acorn mortar slabs and pestles, and related artifacts) or middens containing the trash left by the prehistoric occupants. These identifications applied only to the Point St. George II period, which probably does not extend back much over 1000 years from the present. The Point St. George I period lay beyond the temporal range of these traditions and was unknown to the contemporary Indians. They expressed surprise at seeing the materials from this earlier period and were unable to include them in their existing artifact classifications.

Discussions between Indians at trenchside also revealed important relationships concerning the nature of these oral traditions. Once, two elderly Tolowa women, one very traditional and speaking little English, the other quite knowledgeable about the traditional life but also well acquainted with modern white ideas concerning it, got into a heated argument about who actually lived in the ancient house we uncovered. The traditional woman said Coyote lived there -- Coyote being an important figure in the oral traditions. The other woman argued, "No, this was where our ancestors lived." The argument continued in Athabaskan for some time. My interviews later revealed essential features of TolowaTututni Indian ideas about the past. It was obvious to both of these Indian women, just from looking at our excavations, that this house was very old, since it was buried in about two to three feet of soil. But they disagreed on how to interpret this fact.

The basic rule governing the traditional Tolowa-Tututni interpretation was that beyond the remembered past (the Tolowa-Tututni did not maintain elaborate lineages or recall their relatives back more than a few generations) "people were animals, and animals were people." In this genealogically remote, timeless past, the identities and behavior of animal figures in the traditional mythology (such as Coyote, Killer Whale, Flounder, and others) were interchangeable with those of people. This was the view expressed by the more orthodox woman, while the other woman who accepted the traditional view herself but also understood the Western concept of history, argued that the house had been used by Indian people like themselves. What this exchange revealed was the dissonance between traditional Indian concepts of the past and Western ideas about history. This revealed that the Indians were as interested as we in explaining and understanding the materials we uncovered in our excavations.

Our 1964 experience at Point St. George and subsequent visits to northwestern California demonstrate the value of ethnoarcheological approaches to public archeology and to CRM in general. This brief account of the work at Point St. George shows that ethnoarcheology can assist CRM at two levels. First, there is the practical level, establishing and maintaining good relations between the archeologists and the people of the local area. In our case, the local Indians even played an essential role in helping us locate suitable sites to excavate. Certainly no archeologist planning excavations in northwestern California can afford to ignore Indian concerns about graverobbing and other abuses, and I would expect the same to be true elsewhere. In two recent cases in northwestern California, archeologists who ignored the local Indians found themselves in serious difficulties and had to abandon their fieldwork.

Secondly, ethnoarcheology uniquely assists CRM at the substantive level. At Point St. George, we gained an understanding of the traditional Tolowa-Tututni way of viewing their past. We also had the opportunity to compare the essential differences between their view of the past and our own. As further development of Redwood National Park

proceeds, need will increase for ideas about the history of this region in terms that are both comparative and avoid ethnocentric assumptions about the past as a unique product of Western thought. The spirited debate between my two Tolowa-Tututni informants at Point St. George was the by-product of an ethnoarcheological program compelling all parties to reflect upon their history and come to terms with it. Such reflection is essential in any well informed, multi-ethnic public education or display program.

In short, ethnoarcheology extends the archeologist's efforts beyond excavation or survey to chronicle the past or acquire facts about it. It is the focal point of personal relationships between people of different cultural and traditional backgrounds who seek to comprehend the meaning of their past. It is, in fact, one of the most important ways we have to give meaning to the efforts of CRM.

Richard Gould is a Professor of Anthropology at Brown University, Providence, Rhode Island, and is presently Chairman of Section H (Anthropology) of the AAAS.

STUDENTS AND SURVEY: AN ARCHEOLOGY INTERN PROGRAM CITY POINT, VIRGINIA

David Orr, Brooke Blades, Douglas Campana

At the confluence of the James and Appomattox Rivers, the jut of land called City Point, Virginia has seen human occupation for millennia. Ideally suited to command communications on the river, it was settled first in prehistoric times, and evidence remains of extensive occupation.

In 1607, Christopher Newport and John Smith spent several days at the Appomattox Indian settlement on the opposite shore. Later, in 1635, a land patent for City Point was granted to Francis Eppes. With the exception of a brief displacement during the Civil War, City Point remained with the Eppes family until 1978, when the National Park Service assumed responsibility. This impressive tenure constitutes one of the longest ownerships by a single family in America, and it is this occupancy that NPS archeologists recently studied, with the aid of college students and high school volunteers.

In 1983, the National Park Service initiated an archeological survey as part of the planning process to inventory City Point's archeological resources. The issues under investigation concerned the degree and nature of prehistoric and historic occupation. In order to obtain such information, archeologists worked with volunteers to investigate the Point.

For eight weeks during the summer of 1983, a team of Mid-Atlantic regional archeologists tested the area for prehistoric remains and partially excavated the site of the previously unknown late 17th century house.

Assisting in the excavation were college and graduate students from around the country. High School students from Lower Merion High School (Ardmore, PA) also volunteered to work under field school conditions. They all received hands-on experience in archeological field methods while helping the Park Service stretch limited survey dollars to achieve its survey goals. Their volunteer work on the survey undercut contracting costs for similar efforts by 50~. In return, lectures on remote sensing technology, Civil War history, and the ante-bellum South enriched their individual awareness of their heritage.

The survey of prehistoric sites included excavation of 14 carefully sited test trenches. One test area near the bluff contained in situ Middle Woodland (300 BC - 100 A.D. approximately) ceramics and lithics preserved below the historic occupational zones. Many diagnostic Archaic lithics (8000 - 1000 B.C.) were discovered in association with historic features. Point types found in these contexts span the entire range of the Archaic period, providing extensive evidence for repetitive aboriginal occupation at City Point from Early Archaic times until European contact.

In addition, a remote sensing survey of the Point contracted by the Park Service used ground-penetrating radar apparatus and a magnetometer to locate and map sub-surface anomalies, geophysical features which may indicate the presence of cultural resources on further investigation of the site. Upon excavation, one such rectangular area proved to be the filled cellar of a dwelling probably dating to the late 17th century. All the artifacts recovered, including glass wine bottles, tin-glazed earthenware, and salt-glazed stoneware, dated to no later than 1760. In support of the conservation approach, archeologists excavated only sufficient area to identify the structure, leaving the rest of the artifacts for future study using more advanced techniques.

Both historic and prehistoric aspects of the survey proved highly successful. As a result of the survey, management now has a clear picture of the park's archeological resources. Decisions can be made based on thorough archeological research as to the locations of future construction. The discovery of such extensive sites has enabled archeologists to recommend that the area remain undisturbed and that further management

activity occur behind the Point. Since the survey also uncovered human occupation back to the early Archaic period, such long-term land use patterns may provide a new interpretative thrust to future park programs, depending on management decisions at that time.

Finally, the tremendous amount of information the volunteer program has uncovered far outweighs the cost to the government. The success of the program at one high school has also encouraged the region to seek similar high quality volunteers through a concerted winter program of talks in local schools.

Already another year of volunteer activity is being planned. Work at Valley Forge and Assateague should again provide the National Park Service with a successful and cost effective research program through the use of local volunteers and the volunteers with an enriching educational opportunity.

Brooke Blades and Douglas Campana are archeologists with the Mid-Atlantic Region. David Orr is the Regional Archeologist.

PRESERVATION IN THE PRIVATE SECTOR: SAVING OUR PREHISTORIC HERITAGE

Mark Michel

In 1889, Congress set aside the great Hohokam ruins of Casa Grande in Arizona as a permanent preserve, thus establishing the Nation's interest in preserving its prehistoric legacy. The ruins eventually were incorporated in the National Park System, where more than 30 national park units are dedicated to America's prehistoric heritage. Many other units contain important archeological sites within their borders, and ruins on public lands, mostly in the West, are likewise protected.

The majority of prehistoric ruins in the U. S. still go unprotected. Located on private lands, they are subject to the whims of their owners. Most have already vanished, destroyed by urban development, agricultural practices, or, in recent years, by commercial artifact looters. The Smithsonian Institution surveyed the prehistoric ruins of the Ohio and Mississippi valleys in the 1840's, and found more than 20,000 prehistoric mounds. Today, only about 200 remain. In the State of Arizona, hardly a prehistoric site exists that has not been ravaged by looters.

While the National Park Service and other federal land management agencies have increased their protection of sites on public lands, especially since the adoption of the Archeological Resources Protection Act of 1979, little effort has been made to extend protection to sites outside of public boundaries. All NPS archeological units came from public lands. Mesa Verde originated in Indian and forest land. Mound City Group National Monument in Ohio was part of a decommissioned World War I training base. Thus, the selection of NPS units as well as sites on National Forest and Bureau of Land Management lands occurred because of their location on public lands and not always because of their significance. Thus, the Hopewell culture site at Mound City was preserved, but not the central site of the culture, the nearby Hopewell Mounds. The cliff dwellings at Mesa Verde attract heavy visitation each year but the giant central sites of the Mesa Verde culture located in the valley below continue in private hands.

Founded in New Mexico in 1979 by concerned preservationists, conservationists and archeologists, the Archeological Conservancy seeks to permanently preserve the remains of past civilizations so that they can be studied and enjoyed by future generations. They include the ruins of prehistoric Indians in America dating from at least 10,000 B.C. as well as the sites of historic settlements as recent as the 1890's.

The Archeological Conservancy operates like its model organizations, the Nature Conservancy and the Trust for Public Lands. Important unprotected sites are identified and the Conservancy seeks to obtain title to them through either purchase or donation. The staff of the Conservancy approaches the owners of the land in question and seeks to negotiate an agreement. Trained in tax matters, the Conservancy staff shows the current owners how they can benefit by outright donation of land or by a "bargain sale to charity."

The Conservancy works closely with the archeological community and state and federal government agencies to identify the sites most in need of preservation. State historic preservation officers provide a list of the most important unprotected sites in their state. From these lists and other sources the Conservancy compiles a master list of sites, then attempts to acquire them.

Among the sites protected by the Conservancy are:

* the Hopewell Mounds Group in Ohio, the ceremonial center of a civilization that flourished about the time of Christ;

*Menard-Hodges Mounds in Arkansas, visited by DeSoto in 1541 and described by chroniclers of the expedition as the largest city in "Florida" (probably the original site of Arkansas Post as well);

* a major Mississippian civic-ceremonial complex in Missouri and the largest known village of the Osage Indians;

* Pueblo San Marcos in New Mexico, probably the largest pueblo in the Southwest, controlling the prehistoric turquoise mines; Fort Craig, a large frontier fort, site of the first major battle of the Civil War in the West; an important outlying village of the Chaco Canyon civilization, which dominated the Southwest from about 900 to 1150 A.D.;

* Genevieve Savage Cave in Kentucky, containing the remains of at least 12,000 years of human occupation (transferred to Murray State University for permanent preservation);

* Stackhouse Mound in Ohio, the best preserved remaining Adena mound complex of a civilization that flourished at 1000 B.C.

* The two largest ruins of the great Mesa Verde civilization in Colorado; located near Mesa Verde National Park, each of these ruins contains more rooms and more Kivas than all of the ruins in the park combined.

Once a site has been acquired by the Conservancy, a deed of easement perpetually protecting the archeological values of the land is placed on the property. A master plan is then developed for managing the site. The Conservancy adheres to the principles of "conservation archeology" -- that is, the site is managed so as to preserve it always. Excavations and investigations by archeologists are permitted, but in such a way as to insure a portion of the site remains unexcavated. The reason for this is simple -- the science of archeology continues to advance. Investigations 100 years from now will yield more information than those of today, provided raw data remains to be examined and studied.

The Conservancy does not undertake archeological research itself. Instead, through the use of its master plan, it permits qualified institutions to conduct research on Conservancy sites. When excavations do take place on Conservancy property, strict procedures must be followed, including publication of findings and permanent curation of recovered artifacts in a public repository.

At some point, the more spectacular sites acquired by the Conservancy will be stabilized and interpreted for the general public. The Conservancy advocates public education concerning the people who preceded us -- not only for what it tells us of the past, but what it can tell us of the future. Organizations undertaking this type of work are encouraged to establish public displays of materials recovered from Conservancy sites.

In some cases, the Conservancy may design a long term lease or turn over title to the properties it acquires. Only public institutions such as universities, museums and governments are eligible. This frees Conservancy time and financial resources for more acquisitions and places curatorial responsibility in an organization more able to maintain the property. As a condition of property transfer, the receiver must adhere to the master plan of the Conservancy. Reverter clauses insure that this happens.

The Archeological Conservancy plays an important role in preserving what is left of our Nation's prehistoric heritage. Such commitment often comes with a huge price tag both in dollars and man hours. But time is running out. Our efforts and the efforts of others interested in the country's prehistoric heritage will help to determine which elements of our heritage we will still have with us in the years ahead.

Mark Michel is president of the Archeological Conservancy.

ARCHEOLOGICAL COLLECTIONS: HOW AN ARCHEOLOGICAL CENTER HELPS

John Clonts

The Western Archeological and Conservation Center, through the Division of Anthropology and Library Collections, serves as a central repository for museum collections belonging to 41 field areas located in three regions. There are collections from 23 areas in the Western Region, 14 areas in the Southwest Region, and 4 areas in the Rocky Mountain Region. The Center also houses a small collection of its own. An estimated 150,000 objects are curated and stored at the Center. A repository and conservation lab combined with a computer access comprises the collections management program.

Essentially, the repository functions as a bank does. While it retains primary responsibility for the collections, the collections belong to the field areas. An area may add to the repository or request return of a collection or artifact at any time.

When a collection is transferred to the Center, the field area transfers responsibility for the collection, but not ownership. A superintendent who transfers a collection to the Center no longer needs to budget, program, allocate FTEs, or request cyclic maintenance funds to meet his/ her responsibility to the collections. Rather, these responsibilities are assumed by the Center.

Housed in a 22,000 square foot repository area with controlled temperature and humidity, the collections receive on-site care. Here, problems are evaluated and treated by conservators without delay, instead of waiting for the objects to be transported across the country to be examined by distant experts.

Out of the 150,000 objects at the Center, approximately 80% are archeological. They range from ceramics and stone tools to glass and metal, from the Archaic period to the recent collections of Ft. Bowie. The conservation laboratory works with the archeology laboratory to ensure that archeologists have full access to data while minimally effecting the condition of the objects.

When objects come in from the field, archeologists clean them as thoroughly as vegetable brushes and running water permit. If a problem arises -- for example, if they need to distinguish a patent mark on a piece of metal -- the conservators are next door, willing to work with them to fulfill their informational needs without damaging the recovered object. In the case of the patent mark, the conservators will use techniques which bring it out safely without dipping it in acid, a technique which can cause an object's deterioration not just initially but over time.

One of the major issues presently facing the Service is accounting for and cataloging the large number of archeological collections. To deal with this complex and interesting dilemma, the National Catalog Steering Committee has proposed two changes in the cataloging system. Originally, classification was intended for historic objects with easily determined uses. But the use of archeological materials is often difficult to determine, making it more effective to designate them according to the material of composition. So the committee has recommended that the classification system follow two approaches -- one for historical, the other archeological objects, with the archeological objects being classified according to their material (i.e. stone, metal).

Also by the old rules, each shard theoretically had to be catalogued, an impossible task considering the amount of material uncovered in a single excavation. The Steering Committee has thus recommended a system whereby materials of the same kind found in the same place be entered as one entry in the Catalog. This is called "lot" cataloging. Under the new system, the best guesswork estimates collections at the Center may be completely cataloged within eight years.

In FY 83, the Center began a project to inventory all the collections to establish accountability. The inventory focuses upon essential collections management information. Even with this limitation, about 10,000,000 bits of information will be collected. A microcomputer system has been developed to store and manage the data. Capable of producing over 30 reports, the system provides information on topics such as location, status, and condition of the objects. Park requests for a specific object from their collections will be simplified as the process of locating it and determining its condition is refined.

The presence of so many collections in one place makes their curation more efficient and cost-effective. In addition, curatorial services provided at the Center are seldom found in the field where the expense of maintaining such functions exceeds most budgets. On staff, a curator, conservator, librarian, computer specialist and assistants under them effectively care for collections not required by park programs, collections which otherwise might be stored without benefit of such preservation conditions.

Though the primary mission of the conservation lab is the care of the collections held in the repository, the full services of the lab are available to field areas. These services may either be provided at the park or the objects can be sent to the lab for work. In the past, only nearby areas have taken full advantage of these options, perhaps because only they knew of the conservation and repository functions in Tucson. Nevertheless, such functions are available. But areas wishing to receive any of the collection management services available at the Center should contact their regional curator.

With the relaxation of boundaries separating regional areas from each other, a consolidated and comprehensive program of collections management could maximize the use of Center expertise and facilities, and result in benefits both of time and money to numerous field areas. Such a concept would most likely have to be multi-regional in its approach, thus requiring the development of procedures to give field areas, regional offices, and centers a clear understanding of the program. However, this network of communication and understanding at all regional levels could both improve and speed the care of collections. Working in three regions, the Western Archeological and Conservation Center has begun to do just that.

John Clonts is Chief, Division of Anthropological and Library Collections, Western Archeological and Conservation Center.

RESPONSE TO WILLIAM E. BROWN CRM BULLETIN, VOLUME 6, NUMBER 2

Leland Gilson

New theories about history are fine in their place. It is through the process of theory formulation, testing, and reformulation that intellectual interpretations grow. But an historian should be the first to know that there is a long past of discarded theories. If the future is anything like the past and present, then the present and future will be littered with "dead" theories. Anyone with an historical perspective should have waded through those "dead ideas" like a walk through crisp leaves at the end of autumn.

History is an interpretation of the past... it is not the past. What are the critical sites and structures that mark the tragic turning points in the bright achievements of our history? It's all a matter of interpretation, there are no absolutes... Regardless of theory, regardless of the common interests or differences between people, the cultural resources that exist have something to contribute to the lives of the many.

Public ownership of all potential cultural resources has never been the goal of preservation. Many historic buildings stand on their own. Complex structures with a variety of forms, angles, planes, colors, textures, (ad infinitum) make aesthetic, psychological, emotional, architectural intellectual (ad infinitum) sense to many people.

Theories come and go. Unfortunately, once the "redundant" buildings go, once the resources cease to be, no amount of theory will call them back into existence. It is true that entropy cannot be denied. It is true we cannot save everything, but in the history of preservation, entropy is not denied, and we do not save everything.

There is nothing inherent in preservation that requires preservation at any cost. The language is based on prudent and feasible alternatives. There are guidelines that emphasize avoidance of impacts and counsel preservation of original fabric or replacement with compatible materials. But if the structure has no economic viability, if incentives and physical reality mitigate against preservation, then the structure or site does die. The plug is pulled, but only after reasonable study of the alternatives, hopefully by reasonable people.

The argument that our history is being set aside from our common people is nonsense; it has been the common people who made preservation work through uncommon effort. Perhaps the "little old ladies in tennis shoes" have been forgotten by the new breed of university trained intellectual preservationists, but not by those of us who grew up with the movement. It is this self-same range of interest that keeps preservation alive. Most of our properties are in the hands of private groups and people who have worked hard for their own private reasons to preserve what they hold dear.

We live in our past, plan in our present, and hope for our future. The physical reality of our cities, our structures, our homes, are a constant small dose of our history as an economic and social reality. This fabric is not an interpretation, and is not a theory; it simply exists.

Leland Gilson is staff archeologist with the State Historic Preservation Office in Oregon.